

1. A method of producing a soft tissue paper product, the method comprising the steps of:
  - a) providing a chemical softening composition, said chemical softening composition comprising:
    - a vehicle;
    - a softening active ingredient, wherein said softening active ingredient comprises a quaternary ammonium compound;
    - an electrolyte; and
    - a bilayer disrupter;
  - b) diluting said chemical softening composition to a use concentration;
  - c) providing a slurry of papermaking fibers;
  - d) treating said slurry of papermaking fibers with said diluted chemical softening composition;
  - e) depositing said treated slurry of said papermaking fibers on a foraminous forming wire; and
  - f) dewatering said treated slurry by drainage through said foraminous forming wire to form an embryonic web.
2. The method of Claim 1 wherein said method comprises the additional steps of after step f:
  - a) transferring said embryonic web to a carrier fabric; and
  - b) drying said dewatered slurry while said slurry is supported by said carrier fabric to form a predried paper web.
3. The method of Claim 2 wherein said method comprises the additional steps of after step b:
  - a) transferring said predried paper web to a drying cylinder; and
  - b) drying said predried web to form a paper sheet.
4. The method of Claim 1 wherein:
  - a) said slurry of papermaking fibers comprises separate slurries, a first slurry of relatively short papermaking fibers and a second slurry of relatively long papermaking fibers;
  - b) only said second slurry is treated with said diluted chemical softening composition; and

c) said first slurry is disposed on said Foraminous fabric between said wire and said second slurry.

5. The method of Claim 1 wherein said softening active ingredient comprises at least about 25% of said composition.
6. The method of Claim 4 wherein said softening active ingredient comprises at least about 35% of said composition.
7. The method of Claim 1 wherein said softening active ingredient comprises a quaternary ammonium compound.
8. The method of Claim 7 wherein said quaternary ammonium compound has the formula:



wherein Y is -O-(O)C-, or -C(O)-O-, or -NH-C(O)-, or -C(O)-NH-;

m is 1 to 3;

n is 0 to 4;

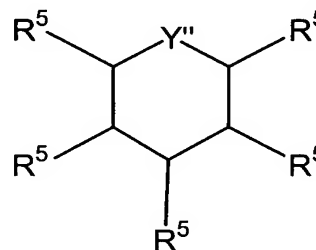
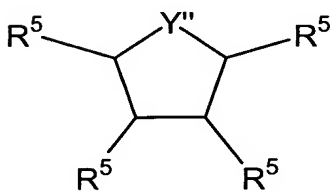
each R<sub>1</sub> is a C<sub>1</sub>-C<sub>6</sub> alkyl or alkenyl group, hydroxyalkyl group, hydrocarbyl or substituted hydrocarbyl group, alkoxyated group, benzyl group, or mixtures thereof;

each R<sub>3</sub> is a C<sub>13</sub>-C<sub>21</sub> alkyl or alkenyl group, hydroxyalkyl group, hydrocarbyl or substituted hydrocarbyl group, alkoxyated group, benzyl group, or mixtures thereof; and

X<sup>-</sup> is any softener-compatible anion.

9. The method of Claim 8 wherein m is 2, n is 2, R<sub>1</sub> is methyl, R<sub>3</sub> is C<sub>15</sub>-C<sub>17</sub> alkyl or alkenyl, and Y is -O-(O)C-, or -C(O)-O-.
10. The method of Claim 9 wherein X<sup>-</sup> is chloride or methyl sulfate.
11. The method of Claim 7 wherein said composition further comprises a plasticizer.
12. The method of Claim 11 wherein said plasticizer is selected from the group consisting of polyethylene glycol, polypropylene glycol and mixtures thereof.
13. The method of Claim 2 wherein said vehicle is water and said electrolyte is a salt selected from the group consisting of the chloride salts of sodium, calcium, and magnesium.

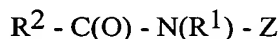
14. The method of Claim 13 wherein said salt is present at a level between about 0.1% and about 20% by weight of said composition.
15. The method of Claim 1 wherein said bilayer disrupter is used at a level of between about 2% and about 15% of the level of said softening active ingredient.
16. The method of Claim 1 wherein said bilayer disrupter is selected from the group consisting of:
  1. nonionic surfactants derived from saturated and/or unsaturated primary, secondary, and/or branched, amine, amide, amine-oxide fatty alcohol, fatty acid, alkyl phenol, and/or alkyl aryl carboxylic acid compounds having from about 6 to about 22 carbon atoms in a hydrophobic chain, wherein at least one active hydrogen of said compounds is ethoxylated with  $\leq 50$  ethylene oxide moieties to provide an HLB of from about 6 to about 20;
  2. nonionic surfactants with bulky head groups selected from:
    - a. surfactants having the formulas:



wherein Y'' = N or O; and each R<sup>5</sup> is selected independently from the following:

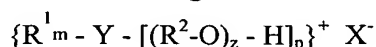
-H, -OH, -(CH<sub>2</sub>)<sub>x</sub>CH<sub>3</sub>, -O(OR<sup>2</sup>)<sub>z</sub>-H, -OR<sup>1</sup>, -OC(O)R<sup>1</sup>, and -CH(CH<sub>2</sub>-(OR<sup>2</sup>)<sub>z'</sub>-H)-CH<sub>2</sub>-(OR<sup>2</sup>)<sub>z</sub>-C(O)R<sup>1</sup>, x and R<sup>1</sup> are as defined above and 5 ≤ z, z', and z'' ≤ 20; and

- b. polyhydroxy fatty acid amide surfactants of the formula:



wherein: each R<sup>1</sup> is H, C<sub>1</sub>-C<sub>4</sub> hydrocarbyl, C<sub>1</sub>-C<sub>4</sub> alkoxyalkyl, or hydroxyalkyl; R<sup>2</sup> is a C<sub>5</sub>-C<sub>21</sub> hydrocarbyl moiety; and each Z is a polyhydroxyhydrocarbyl moiety having a linear hydrocarbyl chain with at least 3 hydroxyls directly connected to the chain, or an ethoxylated derivative thereof; and

3. cationic surfactants having the formula:



wherein  $R^1$  is selected from the group consisting of saturated or unsaturated, primary, secondary or branched chain alkyl or alkyl-aryl hydrocarbons; said hydrocarbon chain having from about 6 to about 22 carbon atoms; each  $R^2$  is selected from the following groups or combinations of the following groups:  $-(CH_2)_n-$  and/or  $-[CH(CH_3)CH_2]-$ ; Y is selected from the following groups:  $=N^+-(A)_q$ ;  $-(CH_2)_n-N^+-(A)_q$ ;  $-B-(CH_2)_n-N^+-(A)_2$ ;  $-(phenyl)-N^+-(A)_q$ ;  $-(B-phenyl)-N^+-(A)_q$ ; with n being from about 1 to about 4, wherein each A is independently selected from the following groups: H;  $C_{1-5}$  alkyl;  $R^1$ ;  $-(R^2O)_z-H$ ;  $-(CH_2)_xCH_3$ ; phenyl, and substituted aryl; where  $0 \leq x \leq$  about 3; and each B is selected from the following groups:  $-O-$ ;  $-NA-$ ;  $-NA_2$ ;  $-C(O)O-$ ; and  $-C(O)N(A)-$ ; wherein  $R^2$  is defined as hereinbefore;  $q = 1$  or  $2$ ; total z per molecule is from about 3 to about 50; and  $X^-$  is an anion which is compatible with fabric softener actives and adjunct ingredients.

17. The method of Claim 16 wherein said bilayer disrupter is a nonionic surfactant having a hydrophobic moiety that is selected from the group consisting of: fatty alcohols having between about 8 and about 18 carbon atoms and alkyl phenols having between about 8 and about 18 carbon atoms wherein said hydrophobic moiety is ethoxylated with between about 3 and about 15 ethylene oxide moieties.
18. The method of Claim 1 wherein said use concentration is between about 0.5% and about 10%.
19. The method of Claim 18 wherein said use concentration is between about 0.5% and about 5%.
20. The method of Claim 19 wherein said use concentration is about 1%.